

Product datasheet for **CF502993**

EIF4E Mouse Monoclonal Antibody [Clone ID: OTI6C11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI6C11
Applications:	FC, WB
Recommended Dilution:	WB 1:500~2000, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human EIF4E (NP_001959) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	24.9 kDa
Gene Name:	eukaryotic translation initiation factor 4E
Database Link:	NP_001959 Entrez Gene 13684 Mouse Entrez Gene 117045 Rat Entrez Gene 1977 Human P06730



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Background:

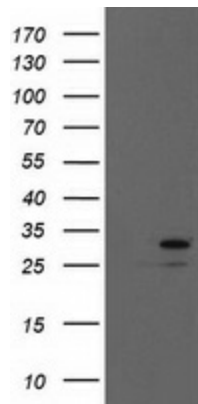
All eukaryotic cellular mRNAs are blocked at their 5-prime ends with the 7-methylguanosine cap structure, m⁷GpppX (where X is any nucleotide). This structure is involved in several cellular processes including enhanced translational efficiency, splicing, mRNA stability, and RNA nuclear export. EIF4E is a eukaryotic translation initiation factor involved in directing ribosomes to the cap structure of mRNAs. It is a 24-kD polypeptide that exists as both a free form and as part of a multiprotein complex termed EIF4F. The EIF4E polypeptide is the rate-limiting component of the eukaryotic translation apparatus and is involved in the mRNA-ribosome binding step of eukaryotic protein synthesis. The other subunits of EIF4F are a 50-kD polypeptide, termed EIF4A (see MIM 601102), that possesses ATPase and RNA helicase activities, and a 220-kD polypeptide, EIF4G (MIM 600495) (Rychlik et al., 1987 [PubMed 3469651]). [supplied by OMIM]

Synonyms:

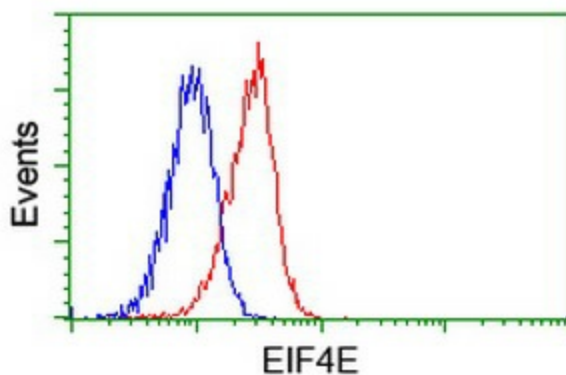
AUTS19; CBP; eIF-4E; EIF4E1; EIF4EL1; EIF4F

Protein Pathways:

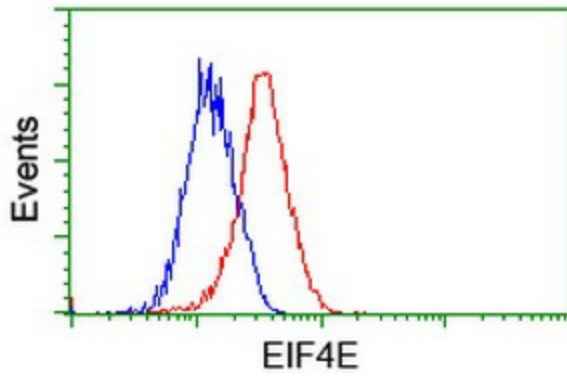
Insulin signaling pathway, mTOR signaling pathway

Product images:

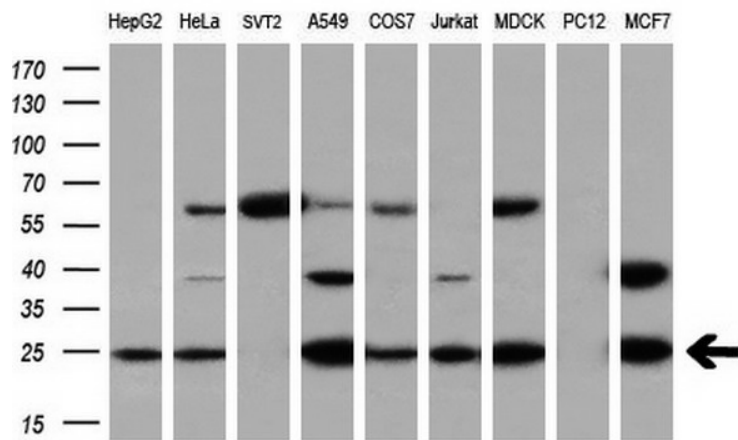
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY EIF4E ([RC207333], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF4E. Positive lysates [LY400723] (100ug) and [LC400723] (20ug) can be purchased separately from OriGene.



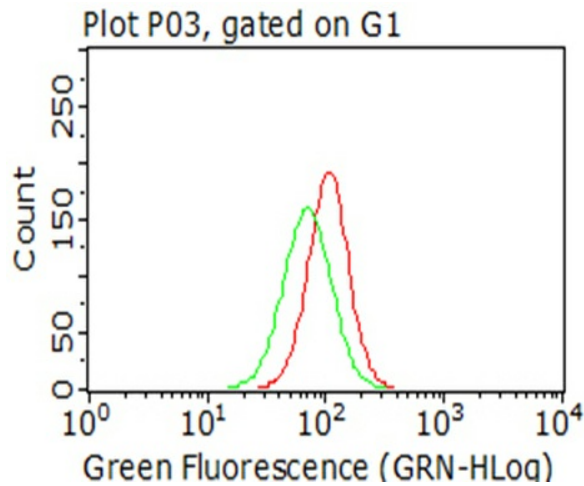
Flow cytometric Analysis of Jurkat cells, using anti-EIF4E antibody ([TA502993]), (Red), compared to a nonspecific negative control antibody, (Blue).



Flow cytometric Analysis of HeLa cells, using anti-EIF4E antibody ([TA502993]), (Red), compared to a nonspecific negative control antibody, (Blue).



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-EIF4E monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).



Flow cytometric Analysis of permeabilized A549 cells, using anti-EIF4E antibody ([TA502993]), (Red), compared to an IgG isotype control, (green) (1:100).